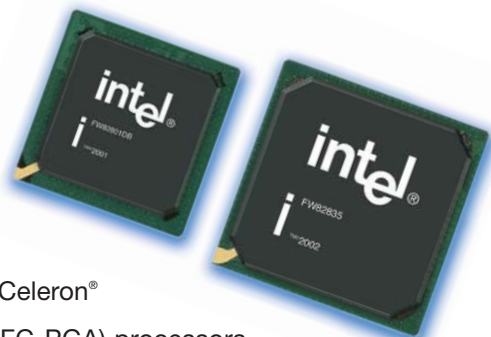




Intel® 835 Chipset for High-Definition (HD) Digital Media CE Devices

Product Overview

The Intel® 835 chipset is the first Intel chipset specifically designed for consumer electronics (CE) devices developed to support high-definition (HD) digital content. The Intel 835 chipset supports the Low Voltage Intel® Celeron® (Micro FC-BGA), Ultra Low Voltage Celeron® (Micro FC-BGA) and Mobile Celeron® (Micro FC-PGA) processors.



The combination of Intel's advanced 0.13 micron process technology, copper interconnects, and a 133 MHz system bus enable these processors to provide the high-performance and low-power consumption required for today's and tomorrow's HD consumer electronics products. Supported processor speeds range from 733 MHz to 1.26 GHz, enabling product designers to choose the optimum processing power for their media-centric applications and devices.

RGBA Interface for HD Graphics

The Intel 835 chipset features a newly developed interface (RGBA) to an external video decoder or TV encoder/mixer. This interface is capable of passing 1080i HD interlaced graphics, in addition to alpha-blending values on a per-pixel basis, to external video decoders and mixers resulting in a superior look and feel for text characters and on-screen displays (OSDs). Per-pixel control of alpha-blending values enables OEMs to customize their OSDs and provide consumers with highly creative and visually appealing on-screen graphics. Electronic program guides (EPGs), control menus, pop-up menus, and any other graphical information can be simultaneously displayed with multiple levels of alpha blending.

Product Highlights

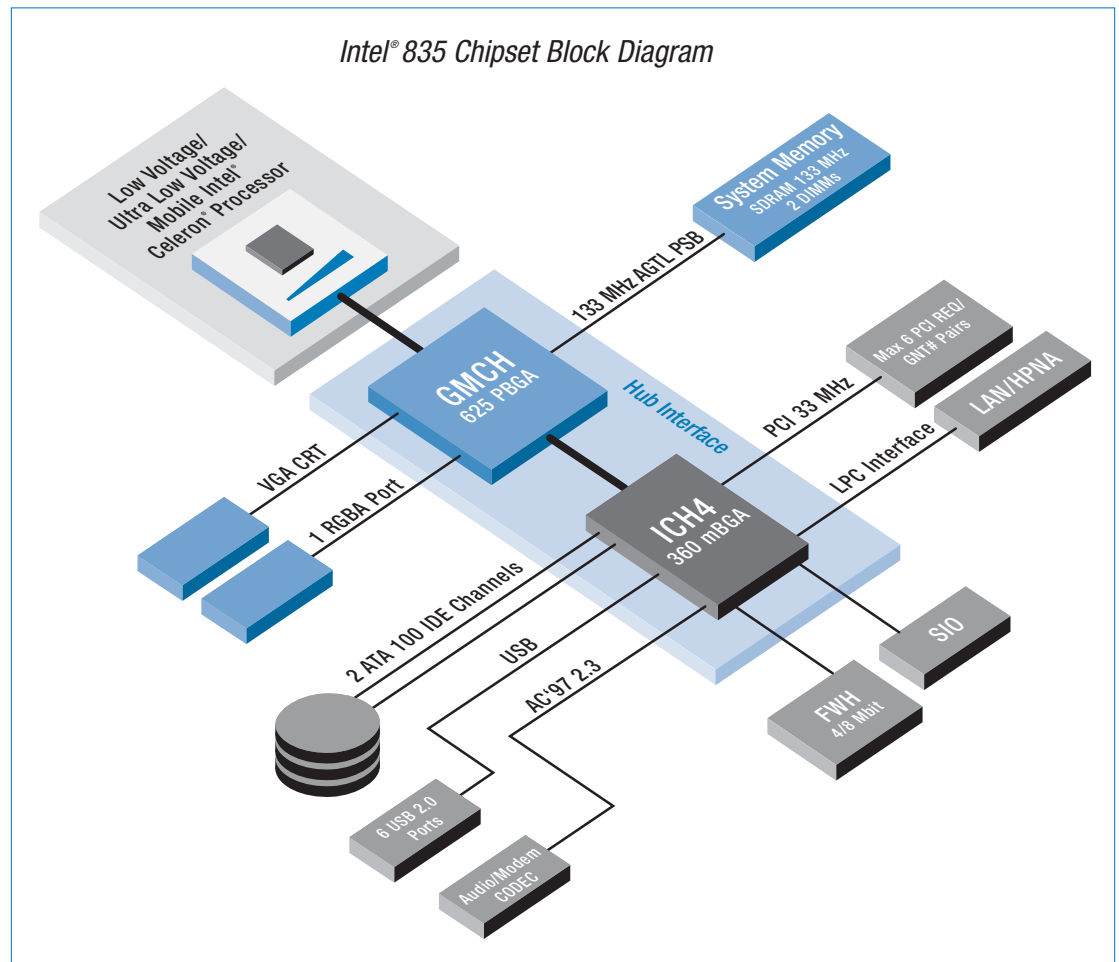
- Flexible processor support ranging from the ULV Intel Celeron processor at 733 MHz to the Mobile Intel® Celeron processor at 1.26 GHz (support for 133 MHz PSB speeds only)
- 1080-line interlaced graphics output mode over the Intel® RGBA interface
- Per-pixel alpha-blending control through the Intel RGBA interface
- Supports up to 1 GB of 133 MHz SDRAM
- Six USB 2.0 ports
- Support for ATA/100
- Integrated 10/100 LAN support
- Intel® Integrated 3D graphics for vivid 2D and 3D graphics
- AC'97 2.3 controller

I/O for Media-centric Devices

The Intel 835 chipset helps product designers meet the input/output requirements of present and future advanced media-centric devices, with support for up to six USB 2.0 ports, two ATA/100 disk drives, AC'97 6 channel audio, and integrated 10/100 LAN capability. High-performance I/O support, coupled with outstanding display quality and control, make the Intel 835 chipset the ideal choice for the next generation of advanced home CE devices.

Intel Quality and Reliability

The HD revolution in digital media is underway, and the Intel 835 chipset provides the performance and stability that customers require for leading-edge consumer electronics applications. Validation with a flexible range of Intel® processors helps minimize design and validation costs, and Intel product quality enables the product reliability that today's consumers demand.



Intel® 835 Chipset

Features	Benefits
Flexible processor support	High-performance with low-power consumption
Supports processor speeds of 733 MHz to 1.26 GHz	Optimum processing power for media-centric CE devices
Intel® Accelerated Hub Architecture	Direct connection to the GMCH enables robust system-level performance
RGBA interface	Supports high-quality 1080i HD interlaced graphics; per-pixel alpha blending
Integrated 2D/3D graphics	Saves board real estate, reduces BOM costs
Supports up to 1GB PC133 SDRAM	Capacity to handle high-resolution graphics data
Two IDE controllers with ATA/100	Dual-channel support for high-capacity digital storage devices
Six USB 2.0 ports	Supports multiple CE imaging products and other peripherals
AC'97 controller with 6 channel sound	Rich, lifelike audio performance
Integrated LAN connect interface	Ready to network with PCs and CE devices

Intel® 835 Chipset Linecard

Product	Product Code	Package	Features
Graphics and Memory Controller Hub (GMCH)	FW82835	625 PBGA	<ul style="list-style-type: none"> ▪ Intel® Accelerated Hub Architecture ▪ Integrated 2D/3D graphics ▪ 1080i graphics output support ▪ Per-pixel alpha-blending support through RGBA ▪ Support for up to 1GB PC133 SDRAM
I/O Controller Hub (IHC)	FW82801DB	421 MBGA	<ul style="list-style-type: none"> ▪ Direct connection to the GMCH with Intel's accelerated hub architecture ▪ Support for 32-bit PCI ▪ Two IDE Controllers with ATA/100 ▪ Six USB 2.0 ports ▪ AC'97 controller with six channel sound ▪ Integrated LAN connect interface

To learn more about Intel® technology in the digital home, visit: www.intel.com/go/digitalhome

To read more about the Digital Home Working Group, visit: www.dhwg.org

To learn about Intel's efforts in consumer electronics, visit: developer.intel.com/design/celext

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